

# AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY, KENTUCKY TITLE V OPERATING PERMIT

Permit No.: 160-97-TV Plant ID: 0062

Effective Date: 30 August 2002 Expiration Date: 30 August 2007

UTM Northing: 4230.2 UTM Easting: 601.4

SIC: 2819 & 2869 NAICS: 325188 & 325199 AFS: 00062

Permission is hereby given by the Air Pollution Control District of Jefferson County to operate equipment located at:

E. I. DuPont de Nemours &Co., Inc. 4200 Camp Ground Road Louisville, Kentucky 40216

in accordance with the permit application on file with the District and under the conditions in the permit. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Permit Applicant: E. I. DuPont de Nemours &Co., Inc.

Responsible Official: Mike N Sanchez

Title of Responsible Official: Plant Manager

Date Application Received: 22 April 1997

Date Application Administratively Complete: 21 June 1997

Date Public Notice Given: 24 September 2000; 10 December 2000; 28 January 2001

Reviewing Engineer (43)

Air Pollution Control Officer

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# **Abbreviations and Acronyms**

AC - Additional Condition AFS - AIRS Facility Subsystem

AIRS - Aerometric Information Retrieval System

APCD - Air Pollution Control District
ASL - Adjusted Significant Level

atm - Atmosphere

BACT - Best Available Control Technology

Btu - British Thermal Unit °C - Degrees Centigrade

CEMS - Continuous Emission Monitoring System CAAA - Clean Air Act Amendments (15 November 1990)

cf - Cubic foot

DOE - District Only Enforceable °F - Degrees Fahrenheit

gal - Gallon

HAP - Hazardous Air Pollutant

Hg - Mercury hr - hour lbs - Pounds l - Liter

MACT - Maximum Achievable Control Technology

m - Meter mg - Milligram mm - Millimeter MM - Million

MOCS - Management of Change System

NAICS - North American Industry Classification System

NSR - New Source Review NO<sub>x</sub> - Nitrogen oxides

NSPS - New Source Performance Standards

PM - Particulate Matter

PM<sub>10</sub> - Particulate matter less than 10 microns

ppm - Parts per million

PSD - Prevention of Significant Deterioration

PMP - Preventive Maintenance Plan psia - Pounds per square inch absolute

RACT - Reasonably Available Control Technology

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO<sub>2</sub> - Sulfur dioxide

TAL - Threshold Ambient LimitTAP - Toxic Air Pollutant

tpy - Tons per year

VOC - Volatile Organic Compound UTM - Universal Transverse Mercator

### **Preamble**

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

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### **General Conditions**

1. <u>Compliance</u> - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)

2. <u>Compliance Certification</u> - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

- 3. <u>Compliance Schedule</u> A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **<u>Duty to Supplement or Correct Application</u>** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

## 5. Emergency Provision

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a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
- ii. The permitted facility was at the time being properly operated.
- iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
- iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)
- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
- 7. <u>Emission Offset Requirements</u> The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

### 9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted

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- activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)
- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
- 12. <u>Insignificant Activities</u> The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, Section 5)
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
  - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
  - b. Have access to and copy records required by this permit.
  - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
  - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)
- 14. Monitoring and Related Record Keeping and Reporting Requirements The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.

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15. Off-permit Documents - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)

- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. <u>Permit Renewal, Expiration and Application</u> Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. <u>Permit Revisions</u> No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. <u>Permit Revision Procedures (Significant)</u> A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
- 24. **Permit Revocation and Termination by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:
  - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.

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b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.

- c. Knowingly making any false statement in any permit application.
- d. Noncompliance with Regulation 1.07, section 4.2; or
- e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. <u>Prevention of Significant Deterioration of Air Quality</u> The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. **Risk Management Plan (112(r))** For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Malfunctions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.
- 35. Submittal of Reports, Data, Notifications, and Applications
  - a. Applications, reports, test data, monitoring data, compliance certifications, and any

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other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Air Pollution Control District of Jefferson County 850 Barret Ave Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Title		
1.01	General Application of Regulations and Standards		
1.02	Definitions		
1.03	Abbreviations and Acronyms		
1.04	Performance Tests		
1.05	Compliance with Emission Standards and Maintenance Requirements		
1.06	Source Self-Monitoring and Reporting		
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies		
1.08	Administrative Procedures		
1.09	Prohibition of Air Pollution		
1.10	Circumvention		
1.11	Control of Open Burning		
1.14	Control of Fugitive Particulate Emissions		
2.01	General Application		
2.02	Air Pollution Regulation Requirements and Exemptions		
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits		
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits		

FEDERALLY ENFORCEABLE REGULATIONS				
Regulation	Title			
2.09	Causes for Permit Suspension			
2.10	Stack Height Considerations			
2.11	Air Quality Model Usage			
2.16	Title V Operating Permits			
4.01	General Provisions for Emergency Episodes			
4.02	Episode Criteria			
4.03	General Abatement Requirements			
4.07	Episode Reporting Requirements			
5.01	General Provisions (for Hazardous Air Pollutants)			
5.03	Potential Hazardous Emissions			
6.01	General Provisions (for Existing Affected Facilities)			
6.02	Emission Monitoring for Existing Sources			
7.01	General Provisions (for New Affected Facilities)			

DISTRICT ONLY ENFORCEABLE REGULATIONS				
Regulation	Title			
1.12	Control of Nuisances			
1.13	Control of Objectionable Odors in the Ambient Air			
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Programs Fees			
8.03	Commuter Vehicle Testing Requirements			

- 37. <u>Stratospheric Ozone Protection Requirements</u> Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:
  - a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;
  - b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air

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- conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR82 Subpart A, Production and Consumption Controls.

(Regulation 2.16, section 4.1.5)

# Emission Unit U1 Description: Powerhouse

Two natural gas or distillate oil #2 fired boilers constructed in 1994 and a #2 fuel oil tank.

# **Applicable Regulations:**

Federally Enforceable Regulations				
Regulation	Regulation Title			
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	1, 2, 3, 4.3, 5.3, 5.4		
7.06	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3, 4, 4.1.2, 4.2, 5, 5.1.2		
40 CFR 60 Subpart A	General Provisions	60.1 through 60.19		
40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	60.40b (a) and (g), 60.41b, 60.42b (a), (e), (g), and (j), 60.43b (f) and (g), 60.44b (a)(1)(ii), (h), and (i), 60.45b (a) and (j), 60.46b (a) through (d) and (e)(4), 60.47b (f), 60.48b (a) through (d), (e), (e)(2), (f), (g)(1), 60.49b (a), (b), (d), (f) through (i), (o), and (r)		
40 CFR 60 Subpart K	Standards of Performance for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1984	60.110 and 60.111		

District Enforceable Regulations				
Regulation Title Section				
7.02	Federal New Source Performance Standards Adopted by Reference	1.1, 1.10, 1.21, 2, 4, 5		

U1 Emission Point Componets				
Equipment ID	Description	Applicable Regulation	Standards	Control Reference
1000 and Two 174 1001 MMBtu/hr	7.06 section 4.1.2	See Additional Condition 1.a.	Uncontrolled	
	boilers	7.06 section 4.2	See Additional Condition 1.b.	
		40 CFR 60.44b (a)(1)(ii) & (i)	See Additional Condition 1.d.i.	
		6.42 section 4.3	See Additional Condition 1.d.ii.	
1003	#2 Fuel oil tank, 200,000 gallons	40 CFR 60.110	See comment 3.	Uncontrolled

#### **Additional Conditions**

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **PM** (Regulation 7.06, section 4.1.2)
    - i. The owner or operator shall limit the PM emissions to 0.1 lb PM/MMBtu heat input.
    - ii. The owner or operator shall limit PM emissions to 58.3 tons per consecutive 12 month period. (Construction permit #657-94-C)
  - b. **Opacity** (Regulation 7.06, section 4.2)

The owner or operator shall not cause emissions which exhibit greater than 20% opacity except:

- i. for indirect heat exchangers with a heat input capacity of less than 250 million Btu/hr, a maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;
- ii. for indirect heat exchangers with heat input capacity of less than 250 million Btu/hr, a maximum of 40% opacity shall be permissible for not more than six consecutive minutes during cleaning the fire box or blowing soot; or
- iii. for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

### $c. SO_2$

- i. The owner or operator shall demonstrate that the oil meets the definition of very low sulfur oil (0.5% sulfur or less) by maintaining fuel receipts. (40 CFR 60.42b(j)(2))
- ii. The owner or operator shall limit  $SO_2$  emissions to 0.8 lb  $SO_2$ /MMBtu. (Regulation 7.06, section 5.1.2)
- iii. The owner or operator shall limit  $SO_2$  emissions to 594.4 tons per consecutive 12 month period. (Construction permit #657-94-C)

### d. NO<sub>x</sub>

i. The owner or operator shall limit NO<sub>x</sub> emissions to 0.2 lb NO<sub>x</sub>/MMBtu. (40

CFR 60.44b (a)(1)(ii))

- ii. The owner or operator shall comply with the NO<sub>x</sub> RACT plan that was adopted by Board Order on November 8, 1999. (See NO<sub>x</sub> RACT Attachment) (Regulation 6.42, section 4.3)
- iii. The owner or operator shall limit  $NO_x$  emissions to 242.5 tons per consecutive 12 month period. (Construction permit #657-94-C)

### e. **VOC**

See Comment 3.

- 2. **Monitoring** (Regulation 2.16, section 4.1.9.1)
  - a. **PM** 
    - i. See Comment 5.
    - ii. See Additional Condition 3.a.
  - b. **Opacity** (40 CFR 60.48b (a), 60.49b (f))

The owner or operator shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring the opacity of emissions.

 $c. SO_2$ 

See Additional Condition 3.c.

d. **NO**<sub>x</sub> (40 CFR 60.48b)

The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxide emissions.

e. VOC

See Comment 3.

- 3. **Record keeping** (Regulation 2.16, section 4.1.9.2)
  - a. **PM** 
    - i. See Comment 5.
    - ii. The owner or operator shall monthly record the amount of each fuel combusted and calculate the 12 consecutive month PM emissions in order to

demonstrate compliance with the limit in additional condition 1.a.ii.

## b. **Opacity**

The owner or operator shall keep records of the output from the continuous opacity monitor.

### c. $SO_2$

- i. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (40 CFR 60.49b (d))
- ii. The owner or operator shall maintain records onsite of the fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil. (40 CFR 60.42b(j))
- iii. The owner or operator shall monthly record the amount of each fuel combusted and calculate the 12 consecutive month  $SO_2$  emissions in order to demonstrate compliance with the limit in additional condition 1.c.iii.

## d. $NO_x$

- i. The owner or operator shall maintain records of the following information for each steam generating unit operating day: (40 CFR 60.49b(g))
  - 1) Calendar date.
  - 2) The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/million Btu heat input) measured or predicted.
  - 3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days
  - 4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
  - 5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - 6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

- 7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- 8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- 9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- 10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix f, Procedure 1.
- ii. The owner or operator shall maintain records of the occurance and duration of any startup, shutdown, or malfunction in the operation of the boilers or any periods during which a continuous monitoring system is inoperative. (40 CFR 60.7 (b))

#### e. VOC

See Comment 3.

# 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### a. **Opacity**

- i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time and results of each exceedance of the opacity standard
- iv. Description of any corrective action taken for each exceedance

The owner or operator shall clearly identify all deviations from permit requirements in the quarterly reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report quarterly the following:

### b. PM

- i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedance of the PM limit in additional

- condition 1.a.ii.
- iv. Description of any corrective action taken for each exceedance
- c.  $SO_2$  (40 CFR 60.49b (r)&(h))
  - i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
  - ii. The beginning and ending date of the reporting period
  - iii. Identification of all periods of exceedance of the sulfur content limit of the fuel oil or the emission limits in additional condition 1.c.ii. and 1.c.iii.
  - iv. Description of any corrective action taken for each exceedance
- d. **NO<sub>x</sub>** (40 CFR 60.49b (h))
  - i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
  - ii. The beginning and ending date of the reporting period
  - iii. Identification of all periods of exceedance of the emission limit in additional condition 1.d.i.
  - iv. Information recorded under 40 CFR 60.49b (g)
  - v. Description of any corrective action taken for each exceedance

### e. VOC

There are no compliance reporting requirements for this pollutant.

### **Comments**

- 1. The replacement of 3 larger existing coal boilers to the current 2 gas/oil boilers, along with the Board Order dated of November 8, 1999 constitute the NO<sub>x</sub> RACT plan, per Regulation 6.42, section 4.3 for this source. (See NO<sub>x</sub> RACT Attachment)
- 2. These boilers are not subject to performance testing or continuous emission monitoring provisions for sulfur dioxide if only very low sulfur oil is burned, fuel receipts are kept, and a quarterly report is submitted as required in 40 CFR 60.45b (j) and 60.47b (f).
- 3. Emission point 1003 does not have any requirements from 40 CFR 60 Subpart K, since the vapor pressure is less than 1.0 psia.
- 4. Emission point 1002 was removed because it was only regulated under 40 CFR 82.
- 5. Calculations of PM emissions, based on the appropriate AP-42 emission factor, demonstrate that the PM lb/MMBtu emissions standard for each emission point cannot be exceeded when operating at design capacity; therefore, no additional recordkeeping or monitoring is required.

# Emission Unit U2 Description: DFE Process

Acetylene is compressed and reacted with hydrogen fluoride to produce 1,1-difluoroethane.

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation	Title	Sections	
1.18	Rule Effectiveness	1, 2, 3	
5.15	Chemical Accident Prevention Provisions	1	
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A through H	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.2, 4.1, 5.2	
6.39	Standard of Performance for Equipment Leaks of Volatile Organic Compounds in Existing Synthetic Organic Chemical and Polymer Manufacturing Plants	1, 2, 3, 4, 5	

District Enforceable Only Regulations					
Regulation	Regulation Title Sections				
5.03	Potential Hazardous Emissions	All			
5.14	Hazardous Air Pollutants and Source Categories	1,2,3,4			

# **Allowable Emissions:**

U2 Emission Points Componets						
Equipment ID	Description	Applicable Regulation	Standards	Control Reference		
2000	DFE Reactors and refining equipment - DFE reflux column,	6.24 section 3.2	See Additional Condition 1.a.i.	CD-200 (Absorber) CD-201 (Absorber) CD-201 vents to CD-200	(Absorber)	(Absorber)
	vent condensers C-300, C-302, C-303	6.39 section 1	See Additional Condition 2.			
2001	Tank Truck Loading DFE	None	None	Uncontrolled		

U2 Emission Points Componets					
Equipment ID	Description	Applicable Regulation	Standards	Control Reference	
2002	Hydrogen fluoride unloading	5.03	See Additional Condition 1.a.ii.	HF fume scrubber CD- 202	
2003	Flame arrestors venting DFE	None	None	Uncontrolled	
2005	DFE product dryer vent	None	None	Uncontrolled	

### **Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall limit VOC emissions from emission point 2000 to less than 40 lbs/day and 8 lbs/hr, unless VOC emissions are reduced by at least 85%. (Regulation 6.24, section 3.2)
- ii. The owner or operator shall maintain a control device on emission point 2002 to control HF emissions. (Regulation 5.03)
- b. **District Regulation 5.15 Regulated Substance** (40 CFR 68 Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted on June 16, 1999.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

#### VOC

- i. See Additional Condition 3.a.i.
- ii. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b). If a instrument reading of 10,000 ppm or greater is measured, a leak is detected. (Regulation 6.39, section 1)
- iii. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (Regulation 6.39, section 1)
- iv. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (Regulation 6.39, section 1)
- 3. **Record keeping** (Regulation 2.16, section 4.1.9.2)

#### **VOC**

i. The owner or operator shall keep records daily of the number of evacuations from emission point 2000. Using the method described in the Title V application dated April 21, 1997, the owner or operator shall calculate monthly the VOC emissions in order to demonstrate that the emission limit in condition 1.a.i. is not exceeded.

- ii. When each leak is detected, the following requirements apply: (Regulation 6.39, section 1)
  - 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
  - 2) The identification may be removed after it has been repaired.
- iii. When a leak is detected, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: (Regulation 6.39, section 1)
  - 1) The instrument and operator identification numbers and the equipment identification number
  - 2) the date the leak was detected and the dates of each attempt to repair the leak.
  - 3) Repair methods applied in each attempt to repair the leak.
  - 4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) after each repair attempt is equal to or greater than 10,000ppm.
  - 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
  - 6) The signature of the owner or operator (or designate) whose decision it was that the repair could not be effected without a process shutdown.
  - 7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
  - 8) Dates of process unit shutdown that occur while equipment is unrepaired.
  - 9) The date of successful repair of the leak.
- iv. The following information pertaining to all equipment subject to the requirements in §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: (Regulation 6.39, section 1)
  - 1) A list of identification numbers for equipment subject to the requirements of this subpart.
  - 2) A list of identification numbers for equipment that are designated for

- no detectable emissions under the provisions of §§60.482-2(e), 60.482-3(i) and 60.482-7(f).
- 3) The designation of equipment as subject to the requirements of \$60.482-2(e), \$60.482-3(i), or \$60.482-7(f) shall be signed by the owner or operator.
- 4) The dates of each compliance test as required in §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).
- 5) The background level measured during each compliance test.
- 6) The maximum instrument reading measured at the equipment during each compliance test.
- 7) A list of identification numbers for equipment in vacum service.

# 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### **VOC**

### For Regulation 6.24

- i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedance of the emission limit in additional condition 1.a.i.
- iv. Description of any corrective action taken for each exceedance

# For Regulation 6.39

- i. Process unit identification
- ii. Number of pumps for which leaks were detected during each month
- iii. Number of pumps for which leaks were not repaired during each month
- iv. The facts that explain each delay of repair, and where appropriate, why a process unit shutdown was technically infeasible
- v. Dates of process unit shutdowns which occurred during the reporting period
- vi. Any revisions to items being reported if changes happen during that reporting period

# **Comments**

- 1. 1,1-Difluoroethane is not a VOC.
- 2. 1,1-Difluoroethane is on the list in 60.489 of products produced in process units. It is not subject to 40 CFR 60 Subpart VV Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry since the process unit was constructed prior to January 5, 1981. It is subject to Regulation 6.39, which applies the conditions of 40 CFR 60 Subpart VV to this unit.
- 3. Emission point 2004 was removed.

# **Emission Unit U3 Description:** Freon 22/F23 Process

Chloroform is reacted with hydrogen fluoride to produce chlorodifluoromethane (F22) as the primary product and trifluoromethane (F23) and anhydrous hydrogen chloride as byproducts.

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation	Title	Sections	
1.18	Rule Effectiveness	1, 2, 3	
5.15	Chemical Accident Prevention Provisions	1	
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A through H	
6.13	Standards of Performance for Existing Storage Vessels for Volatile Organic Substances	1, 2, 3.1, 4	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.2, 4.1, 5.2	
40 CFR 63 Subpart A	General Provisions	63.1 through 63.15	
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	63.100, 63.101, 63.102, 63.103, 63.104, 63.105, 63.106	
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	63.110 through 63.123, 63.126 through 63.149, 63.151, and 63.152	
40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.	63.160, 63.161, 63.162, 63.163, 63.168, 63.175, 63.176, 63.180, 63.181, 63.182	

District Enforceable Only Regulations			
Regulation Title		Sections	
5.02	Federal Emission Standards for Hazardous Air Pollutants Adopted by Reference	2.1, 2.6, 2.7, 2.8	

District Enforceable Only Regulations			
Regulation Title Section		Sections	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

# **Allowable Emissions:**

U3 Emission Points Componets					
Equipment ID	Description	Applicable Regulation	Standards	Control Reference	
3000	Two Chloroform storage tanks TS-3 and TS-18 Greater than 40,000 gallons each. Installed in 1954.	6.13	See Additional Condition 1.b.	CD-300 (Condenser)	
		5.11	<asl< td=""></asl<>		
		40 CFR 63 Subpart F,G,H	See Additional Condition 1.a.		
3001	Chlorine vaporizers V-1 and V-2	5.11	<asl< td=""><td>CD-301 (Wet Scrubber)</td></asl<>	CD-301 (Wet Scrubber)	
3002	Catalytic reactors and refining equipment for manufacturing Freon 22 and Freon 23: 2 reactors, catalyst recovery tank (TR-8), 2 maintenance jets, organic receiver tank (TW-1)	40 CFR 63 Subpart F,H	See Additional Condition 1.a.	CD-302 (East Scrubber) CD-303 (West Scrubber)	
		5.11	<asl< td=""></asl<>		
		6.24	See Additional Condition 1.b.ii.		
3003	Freon 23 Column bottom vent to atmosphere	None	See Comment 1.	Uncontrolled	
3004	Freon 23 crude storage tank (TS-601) and vent condenser above storage tank	None	See Comment 1.	Uncontrolled	

U3 Emission Points Componets					
Equipment ID	Description	Applicable Regulation	Standards	Control Reference	
3005	Freon 23 crude storage tank (TS-600) and vent condenser above storage tank	None	See Comment 1.	Uncontrolled	
3006	Freon 22 recovery system: Crude tank (TR-2), #2 water scrubber (SB-70), #1 Alkali separator, #2 Alkali separator, Acid flash tank (KP-2), Alkali flash tank (KP- 3), Knockout pot (KP- 1), 2 dryers (D-101, D-102), 2 compressors	None	See Comment 1.	Uncontrolled	
3007	#2 drying column blowdown	None	See Comment 1.	Uncontrolled	
3008	Freon 22 storage and loading	None	See Comment 1.	Uncontrolled	
3009	Fugitive emissions (20 Elbows, 14 Screwed Connections, 2 Pumps, 9 Tees, 4 Unions, 137 Valves, 404 Flanges in light- liquid service)	40 CFR 63 Subpart F,H	Equipment leaks	Uncontrolled	
3010	HF column vacuum jet	None	See Comment 1.	Uncontrolled	
3011	Alkali separator drainage collection tanks	None	See Comment 1.	Uncontrolled	
3012	Freon 23 dryer regeneration vent	None	See Comment 1.	Uncontrolled	

### **Additional Conditions**

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **HAP** (40 CFR 63 Subpart F, 40 CFR 63 Subpart G, 40 CFR 63 Subpart H)
    - i. The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair. The owner or operator shall modify and update the information required as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. The descriptions shall:
      - 1) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities.
      - 2) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere.
      - 3) Specify the procedures to be followed when clearing materials from process equipment.
    - ii. The instrument reading, as determined by the method as specified in §63.180(b) of this subpart, that defines a leak in each phase of the standard is 1,000 parts per million or greater. (40 CFR 63.163(b)(2)(iii)(C)) For pumps to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected. (40 CFR 63.163(c)(3))
    - iii. The owner or operator shall operate a closed vent system and a control device on the two storage tanks in emission point 3000. The control device shall comply with the following: (40 CFR 63.119(a)(1))
      - 1) The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. (40 CFR 63.119(e)(1))
      - 2) Periods of planned or routine maintenance of the control device, during which the control device does not meet the specifications, shall not exceed 240 hours per year. (40 CFR 63.119(e)(3))

### b. VOC

i. The owner or operator shall use a vapor recovery system on emission point 3000. (Regulation 6.13, section 3.1)

ii. The owner or operator shall limit VOC emissions to 3000 lb/day and 450 lb/hr from emission point 3002. (Regulation 6.24, section 3.3)

# c. **TAP** (Regulation 5.11)

The owner or operator shall limit TAP emissions to less than the ASL, unless modeling, a RACT analysis, or a BACT analysis is performed.

d. **District Regulation 5.15 Regulated Substance** (40 CFR 68 Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted on June 16, 1999.

- 2. **Monitoring** (Regulation 2.16, section 4.1.9.1)
  - a. HAP (40 CFR 63 Subpart F, 40 CFR 63 Subpart G, 40 CFR 63 Subpart H)
    - i. The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph 1), or submit the results of a performance test as described in paragraph 2). (40 CFR 63.120(d)(1))
      - The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs a) through e), as applicable.
        - a) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.
        - b) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760°C is used to meet the emission reduction, documentation that those conditions exist is sufficient to meet the requirements of paragraph 1).
        - c) Except as provided in paragraph (B) of this section, for thermal incinerators, the design evaluation shall include the autoignition temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature.

- d) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.
- e) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.
- ii. The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section, except as provided in §63.162(b) of this subpart and paragraphs (e) through (j) of this section. (40 CFR 63.163(b)(1))
- iii. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (40 CFR 63.163(b)(3))
  - 1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (c)(3) of this section or §63.171 of this subpart. (40 CFR 63.163(c)(1))
  - 2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable. (40 CFR 63.163(c)(2))
    - a) Tightening of packing gland nuts. (40 CFR 63.163(c)(2)(i))
    - b) Ensuring that the seal flush is operating at design pressure and temperature. (40 CFR 63.163(c)(2)(ii))

### b. **VOC**

i. For control device CD-300 (Condenser), the owner or operator shall monitor the temperature daily to insure that it does not rise above -31°F.

ii. For control device CD-301 (Wet Scrubber), the owner or operator shall monitor the concentration of NaOH weekly to insure that it does not drop below 8%.

- iii. For control device CD-302 (Wet Scrubber), the owner or operator shall monitor the concentration of chloroform in the water and continue to recirculate it until it reaches less than 1ppm.
- iv. For control device CD-303 (Wet Scrubber), the owner or operator shall monitor the pH of the water to insure that it is neutralized.

### c. TAP

See Additional Condition 3.c.

- 3. **Record keeping** (Regulation 2.16, section 4.1.9.2)
  - a. **HAP** (40 CFR 63 Subpart F, 40 CFR 63 Subpart G, 40 CFR 63 Subpart H)
    - i. The owner or operator shall keep records of the occurance and duration of each start up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment or continuous monitoring systems used to comply with subparts F, G, or H during which excess emissions occur. (40 CFR 63.103(c)(2)(i))
    - ii. The owner or operator shall keep records; for each start up, shut down or malfunction during which excess emissions occur; to demonstrate that the procedures specified in the source's start up, shut down, and malfunction plan were followed and documentation of actions taken that are not consistent with the plan. (40 CFR 63.103(c)(2)(ii))
    - iii. The owner or operator shall keep records, for each heat exchange system, indicating a leak and when the leak was detected, and if demonstrated to not be a leak, the basis of that determination; any leaks detected by procedures subject to paragraph 63.104(c)(2) and the date the leak was discovered; the dates of efforts to repair the leak; and the method or procedure used to confirm repair of a leak and the date the repair was confirmed. (40 CFR 63.104(f)(1))
    - iv. The owner or operator shall maintain a record of the information required in Additional Condition 1.a.i.
    - v. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in §63.174 of this subpart and instrumentation systems) subject to the requirements of 40 CFR 63 Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are

- identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174(b)(1) or (b)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(1)(i))
- vi. A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of 40 CFR 63 Subpart H and valves subject to the provisions of §63.168(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(1)(ii))
- vii. Equipment subject to the provisions of 40 CFR 63 Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. (40 CFR 63.181(b)(1)(iii))
- viii. A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(2)(i))
- ix. Identification of screwed connectors subject to the requirements of §63.174(c)(2) of 40 CFR 63 Subpart H. Identification can be by area or grouping as long as the total number within each group or area is recorded. (40 CFR 63.181(b)(5))
- x. The following information pertaining to all pumps subject to the provisions of §63.163(j) and valves subject to the provisions of §63.168(h) and (i) of 40 CFR 63 Subpart H shall be recorded: (40 CFR 63.181(b)(7))
  - 1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment. (40 CFR 63.181(b)(7)(i))
  - A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. (40 CFR 63.181(b)(7)(ii))
- xi. A list of valves removed from and added to the process unit, as described in \$63.168(e)(1) of 40 CFR 63 Subpart H, if the net credits for removed valves is expected to be used. (40 CFR 63.181(b)(8)(i))
- xii. For visual inspections of equipment subject to the provisions of 40 CFR 63 Subpart H [e.g., §63.163(b)(3), §63.163(e)(4)(i)], the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this inspection, except as provided in paragraph (e) of this section. These records shall be retained for 5 years. (40 CFR 63.181(c))

- xiii. When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of 40 CFR 63 Subpart H, the following information shall be recorded and kept for 5 years: (40 CFR 63.181(d))
  - 1) The instrument and the equipment identification number and the operator name, initials, or identification number. (40 CFR 63.181(d)(1))
  - 2) The date the leak was detected and the date of first attempt to repair the leak. (40 CFR 63.181(d)(2))
  - 3) The date of successful repair of the leak. (40 CFR 63.181(d)(3))
  - 4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable. (40 CFR 63.181(d)(4))
  - 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (40 CFR 63.181(d)(5))
    - a) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup / shutdown / malfunction plan, required by §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. (40 CFR 63.181(d)(5)(i))
    - b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. (40 CFR 63.181(d)(5)(ii))
  - Dates of process unit shutdowns that occur while the equipment is unrepaired. (40 CFR 63.181(d)(6))
  - 7) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of 40 CFR 63 Subpart H, as described in §63.174(c)(1) of 40 CFR 63 Subpart H, unless the owner or operator elects to comply with the provisions of §63.174(c)(1)(ii) of 40 CFR 63 Subpart H. (40 CFR 63.181(d)(7)(i))

- 8) The date and results of monitoring as required in §63.174© of 40 CFR 63 Subpart H. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of this section, then all connectors within the designated location shall be monitored. (40 CFR 63.181(d)(7)(ii))
- 9) Copies of the periodic reports as specified in §63.182(d) of 40 CFR 63 Subpart H, if records are not maintained on a computerized database capable of generating summary reports from the records. (40 CFR 63.181(d)(9))
- xiv. Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of 40 CFR 63 Subpart H shall maintain the records specified in paragraphs (h)(1) through (h)(9) of this section for the period of the quality improvement program for the process unit. (40 CFR 63.181(h))
  - 1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(1))
    - a) All data required in §63.175(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(i))
    - b) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter. (40 CFR 63.181(h)(1)(ii))
    - c) The beginning and ending dates while meeting the requirements of §63.175(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(iii))
  - 2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(2))
    - a) All data required in §63.175(e)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(i))
    - b) The percent leaking valves observed each quarter. (40 CFR 63.181(h)(2)(ii))
    - c) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(2)(iii))
    - d) The beginning and ending dates while meeting the

- requirements of §63.175(e) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(iv))
- 3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(3))
  - a) All data required in §63.176(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(i))
  - b) The rolling average percent leaking pumps. (40 CFR 63.181(h)(3)(ii))
  - c) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(3)(iii))
  - d) The beginning and ending dates while meeting the requirements of §63.176(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(iv))
- 4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair. (40 CFR 63.181(h)(4))
- 5) Records of all analyses required in §§63.175(e) and 63.176(d) of 40 CFR 63 Subpart H. The records will include the following: (40 CFR 63.181(h)(5))
  - a) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices. (40 CFR 63.181(h)(5)(i))
  - b) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials. (40 CFR 63.181(h)(5)(ii))
  - c) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(5)(iii))
  - d) The beginning date and duration of performance trials of each candidate superior emission performing technology. (40 CFR

## 63.181(h)(5)(iv))

- 6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(6))
- Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(7))
- 8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(8))
- 9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services. (40 CFR 63.181(h)(9))
- xv. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63 Subpart H under §63.160 of 40 CFR 63 Subpart H. (40 CFR 63.181(j))
- xvi. The owner or operator shall keep a record of the dimensions and capacity of each storage vessel in emission point 3000. (40 CFR 63.123(a))
- xvii. An owner or operator who elects to comply with §63.119(e) of this subpart shall keep in a readily accessible location the records specified in the following paragraphs. (40 CFR 63.123(f))
  - 1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5).
  - A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of §63.119(e)(1) or (e)(2), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in the following paragraphs.
    - a) The first time of day and date the requirements of §63.119(e)(1) or (e)(2), as applicable, were not met at the beginning of the planned routine maintenance, and
    - b) The first time of day and date the requirements of \$63.119(e)(1) or (e)(2), as applicable, were met at the conclusion of the planned routine maintenance.

### b. **VOC**

- i. The owner or operator shall keep records of the data collected from the monitoring of control devices CD-300, CD-301, CD-302, and CD-303.
- ii. The owner or operator shall keep records daily of the number of reactor vent downs and the number of production hours for emission point 3002. Using the method described in the Title V application dated April 21, 1997, the owner or operator shall calculate monthly the VOC emissions in order to demonstrate that the emission limit in condition 1.a.i. is not exceeded.

### c. TAP

The owner or operator shall calculate and record monthly TAP emissions using a 30-day material balance, and ascertain that the adjusted significant level (ASL) has not been exceeded; and make these records available to the District upon request.

### 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

- a. HAP (40 CFR 63 Subpart F, 40 CFR 63 Subpart G, 40 CFR 63 Subpart H)
  - i. The number of valves for which leaks were detected as described in §63.168(b) of this subpart, the percent leakers, and the total number of valves monitored; 40 CFR 63.182(d)(2)(i)
  - ii. The number of valves for which leaks were not repaired as required in §63.168(f) of this subpart, identifying the number of those that are determined nonrepairable; 40 CFR 63.182(d)(2)(ii)
  - iii. The number of pumps for which leaks were detected as described in \$63.163(b) of this subpart, the percent leakers, and the total number of pumps monitored; 40 CFR 63.182(d)(2)(iii)
  - iv. The number of pumps for which leaks were not repaired as required in §63.163(c) of this subpart; 40 CFR 63.182(d)(2)(iv)
  - v. The number of connectors for which leaks were detected as described in §63.174(a) of this subpart, the percent of connectors leaking, and the total number of connectors monitored; 40 CFR 63.182(d)(2)(ix)
  - vi. The number of connectors for which leaks were not repaired as required in

- §63.174(d) of this subpart, identifying the number of those that are determined nonrepairable; 40 CFR 63.182(d)(2)(xi)
- vii. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. 40 CFR 63.182(d)(2)(xiii)
- viii. The results of all monitoring to show compliance with §§63.164(i), 63.165(a), and 63.172(f) of this subpart conducted within the semiannual reporting period. 40 CFR 63.182(d)(2)(xiv)
- ix. If applicable, the initiation of a monthly monitoring program under \$63.168(d)(1)(i) of this subpart, or a quality improvement program under either \$\$63.175 or 63.176 of this subpart. 40 CFR 63.182(d)(2)(xv)
- x. If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of this subpart. 40 CFR 63.182(d)(2)(xvi)
- xi. If applicable, the compliance option that has been selected under §63.172(n). 40 CFR 63.182(d)(2)(xvii)
- xii. As required by §63.120(d)(4) and §63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of 40 CFR 63 for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119(e)(1) or (e)(2) of this subpart, as applicable. (40 CFR 63.122(g)(1))
  - 1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. (40 CFR 63.122(g)(1)(i))
  - A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of \$63.119(e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance. (40 CFR 63.122(g)(1)(ii))
- xiii. If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section. (40 CFR 63.122(g)(2))

- 1) Identification of the control device for which the measured parameters were outside of the established ranges, and 40 CFR 63.122(g)(2)(i)
- 2) Cause for the measured parameters to be outside of the established ranges. 40 CFR 63.122(g)(2)(ii)

### b. **VOC**

- i. Emission Unit ID number, Stack ID number, and/or Emission point ID number and the Control Device ID
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedance of the monitored parameters
- iv. Description of any corrective action taken for each exceedance

## c. TAP

There are no compliance reporting requirements for this pollutant.

### **Comments**

- 1. Emission points 3003, 3004, 3005, 3006, 3007, 3008, 3010, 3011, and 3012 are listed because they are part of the process but they are regulated by 40 CFR 82.
- 2. Regulation 6.39 applies but compliance with 40 CFR 63 Subpart H is deemed to constitute compliance with Regulation 6.39 per 40 CFR 63.160(c)(1).

# **Emission Unit U4 Description:** HCl

Anhydrous hydrogen chloride gas from the Freon® 22/F23 process is absorbed in water to produce hydrochloric acid.

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation Title Sections			
5.15	Chemical Accident Prevention Provisions 1		
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A through H	

District Enforceable Only Regulations			
Regulation Title Sections			
5.11 Standards of Performance for Existing Sources 1, 2, 3, 4 Emitting Toxic Air Pollutants		1, 2, 3, 4	

U4 Emission Point Componets				
				Control Reference
4000	HCl stripping, storage and unloading	5.11	TAL	CD-400 (Scrubber)
4001	Fugitive emissions - HCl	5.11	TAL	Uncontrolled

### 1. **Standards** (Regulation 2.16, section 4.1.1)

## a. **TAP** (Regulation 5.11)

The owner or operator shall limit plantwide HCL emissions to 2.8 lb/hr on a 1-hour average basis as demonstrated in the modeling submitted and approved by the District dated April 1993.

### b. **District Regulation 5.15 Regulated Substance** (40 CFR 68 Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted on June 16, 1999.

## 2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

#### **TAP**

See Additional Condition 3.b.

### 3. **Record keeping** (Regulation 2.16, section 4.1.9.2)

### **TAP**

The owner or operator shall for each calendar month, maintain records showing that the modeling parameters (stack height, temperature, ect.) have not changed; and make these records available to the District upon request.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### **TAP**

- i. Emission Unit ID number, Stack ID number, and/or Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedance of the limit
- iv. Description of any corrective action taken for each exceedance

Emission Unit U5 Description: Gasoline Dispensing

These tanks are used for refueling onsite vehicles

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation Title Sections			
6.40	Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery)	1.3	
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	1, 2, 3.1, 3.3, 3.4, 3.6, 3.7, 3.8 and 5	

District Enforceable Only Regulations			
Regulation Title Sections			
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

U5 Emission Points Componets				
Identification	Description	Applicable Regulation	Standards	Control Reference
5000	Unleaded gasoline storage tank, 1000	6.40	See Additional Condition 1.f.	Uncontrolled
	gallons	7.15	See Additional Condition 1.	

1. **Standards** (Regulation 2.16, section 4.1.1)

**VOC** (Regulation 7.15, section 3 and Regulation 6.40, section 1.3)

- a. The owner or operator shall install, maintain and operate the storage tank with a submerged fill pipe, vent line restrictions, a vapor balance system, and vapor tight connections on the liquid fill and vapor return hoses.
- b. The owner or operator shall not allow delivery of fuel to the storage tanks until the vapor balance system is properly connected.
- c. The owner or operator shall not allow delivery of gasoline to a service station without connecting the vapor return hose between the tank of the truck and the storage tank receiving the product.
- d. The owner or operator shall maintain all above ground tanks with dry breaks
- e. The owner or operator shall operate and maintain equipment with no defects and all fill tubes shall be equipped with vapor-tight covers including gaskets; all hoses, fittings and couplings shall be in vapor-tight condition; and all dry breaks shall have vapor tight seals and shall be equipped with vapor tight covers or dust covers
- f. The owner or operator shall not exceed 10000 gallons of thoughtput per month, in order to be exempted from Regulation 6.40, except for the recordkeeping and reporting requirements. (Regulation 6.40, section 1.3)
- 2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

**VOC** 

See Additional Condition 3.

3. **Record keeping** (Regulation 2.16, section 4.1.9.2)

**VOC** (Regulation 6.40, section 3.1.1)

The owner or operator shall keep a record of the amount of throughput of gasoline per month to determine compliance with Additional Condition 1.f.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

VOC

The owner or operator shall submit a report within 30 days of December 16 every

year showing that they are still exempt from Regulation 6.40.

# **Emission Unit U6 Description:** VF Process

Difluoroethane is reacted to form vinyl fluoride and hydrogen fluoride.

# **Applicable Regulations:**

Federally Enforceable Regulations				
Regulation Title Sections				
5.15	Chemical Accident Prevention Provisions	1		
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A through H		
6.39	Standard of Performance for Equipment Leaks of Volatile Organic Compounds in Existing Synthetic Organic Chemical and Polymer Manufacturing Plants	1, 2, 3, 4, 5		

District Enforceable Only Regulations			
Regulation Title Sections			
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

	U6 Emission Points Componets			
Identification	Description	Applicable Regulation	Standards	Control Reference
6000	DFE/VF reactors and refining equipment	6.39	See Additional Condition 1.a.	Uncontrolled
6001	Tank Truck Loading	6.39	See Additional Condition 1.a.	Uncontrolled
6002	VF Loading Compressor	6.39	See Additional Condition 1.a.	Uncontrolled
6003	Fugitive emissions	6.39	See Additional Condition 1.a.	Uncontrolled
6004	VF Pure column vent	6.39	See Additional Condition 1.a.	Uncontrolled

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **VOC** (Regulation 6.39, section 1)

There are no VOC standards under this regulation for this emission unit.

b. **District Regulation 5.15 Regulated Substance** (40 CFR 68 Subpart G)

The owner or operator shall comply with the Risk Management Plan submitted on June 16, 1999.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

**VOC** (Regulation 6.39, section 1)

- i. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b). If a instrument reading of 10,000 ppm or greater is measured, a leak is detected. (Regulation 6.39, section 1)
- ii. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (Regulation 6.39, section 1)
- iii. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (Regulation 6.39, section 1)
- 3. **Record keeping** (Regulation 2.16, section 4.1.9.2)

**VOC** (Regulation 6.39, section 1)

- i. When each leak is detected, the following requirements apply: (Regulation 6.39, section 1)
  - 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
  - 2) The identification may be removed after it has been repaired.
- ii. When a leak is detected, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: (Regulation 6.39, section 1)

- 1) The instrument and operator identification numbers and the equipment identification number
- 2) the date the leak was detected and the dates of each attempt to repair the leak.
- 3) Repair methods applied in each attempt to repair the leak.
- 4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) after each repair attempt is equal to or greater than 10,000ppm.
- 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- 6) The signature of the owner or operator (or designate) whose decision it was that the repair could not be effected without a process shutdown.
- 7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
- 8) Dates of process unit shutdown that occur while equipment is unrepaired.
- 9) The date of successful repair of the leak.
- iii. The following information pertaining to all equipment subject to the requirements in §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: (Regulation 6.39, section 1)
  - 1) A list of identification numbers for equipment subject to the requirements of this subpart.
  - A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §\$60.482-2(e), 60.482-3(i) and 60.482-7(f).
  - 3) The designation of equipment as subject to the requirements of \$60.482-2(e), \$60.482-3(i), or \$60.482-7(f) shall be signed by the owner or operator.
  - 4) The dates of each compliance test as required in §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).
  - 5) The background level measured during each compliance test.
  - 6) The maximum instrument reading measured at the equipment during

each compliance test.

7) A list of identification numbers for equipment in vacum service.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### **VOC**

- i. Process unit identification
- ii. Number of pumps for which leaks were detected during each month
- iii. Number of pumps for which leaks were not repaired during each month
- iv. The facts that explain each delay of repair, and where appropriate, why a process unit shutdown was technically infeasible
- v. Dates of process unit shutdowns which occurred during the reporting period
- vi. Any revisions to items being reported if changes happen during that reporting period

Emission Unit U7 Description: Non-halogenated cold solvent parts cleaner

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation Title Applicable Section			
6.18	Standards of Performance for New Solvent Metal Cleaning Equipment	1, 2, 3, 4	

Pollutant	Standard
VOC	See Additional Condition 1.

1. **Standards** (Regulation 2.16, section 4.1.1)

**VOC** (Regulation 6.18, section 4.1, 4.2, 4.3.2)

- a. The cleaner shall be equipped with a cover.
- b. The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner.
- c. A permanent, conspicuous label summarizing the operating requirements specified in section 4.2 shall be installed on or near the cleaner.
- d. If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
- e. Do not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. Store waste VOC only in covered containers.
- f. Close degreaser cover whenever not handling a part in the cleaner.
- g. Drain cleaned parts until dripping ceases (15 seconds is usually necessary).
- h. The owner or operator shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).
- 2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### VOC

The owner or operator shall conduct monthly inspections to verify ongoing compliance with the control and operational requirements specified in Additional Condition 1.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

**VOC** (Regulation 6.18, section 4.4)

- a. The owner or operator shall maintain records that include the following for each purchase:
  - i. The name and address of the solvent supplier,
  - ii. The date of the purchase,
  - iii. The type of the solvent, and

- iv. The vapor pressure of the solvent measured in mm Hg at  $20^{\circ}$ C ( $68^{\circ}$ F).
- b. All records required by section 4.4 shall be retained for 5 years and made available to the District upon request.
- c. The owner or operator shall maintain records of the results of the inspections specified in Additional Condition 2.
- 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

# VOC

There are no compliance reporting requirements for this pollutant

### **Permit Shield**

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

### **Off-Permit Documents**

<u>Date</u>

1.18 Rule Effectiveness plan September 20, 1994 Risk Management Plan June 16, 1999

## **Alternative Operating Scenario**

The source requested no alternative operating scenario in its Title V application.

Source-wide HAP Speciation			
НАР	CAS Number		
Hydrochloric Acid	7647-01-0		
Arsine (Arsenic compounds)	NA		
Chloroform	67-66-3		
Hydrogen fluoride	7664-39-3		
Chlorine	7782-50-5		

Insignificant Activities			
Description	Quantity	Basis	
Research and Development activities	1	Regulation 2.02, section 2.3.27	
Internal combustion engines	various	Regulation 2.02, section 2.2	
Brazing, soldering or welding equipment	various	Regulation 2.02, section 2.3.4	
Woodworking, not including hogging or burning	various	Regulation 2.02, section 2.3.5	
Emergency relief vents and ventilating systems (not otherwise regulated)	various	Regulation 2.02, section 2.3.10	

Insignificant Activities			
Description	Quantity	Basis	
Lab ventilating and exhausting systems for nonradioactive materials	1	Regulation 2.02, section 2.3.11	
Laundry	1	Regulation 2.02, section 2.3.3	
Portable diesel or gasoline storage tanks	1	Regulation 2.02, section 2.3.23	

- A. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- B. Activities identified In Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
  - i. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirements which shall include a 20% opacity limit for facilities not otherwise regulated.
  - ii. No periodic monitoring shall be required for facilities designated as insignificant activities.
- C. The Insignificant Activities table is correct as of the issuance date of the permit. The company is required to submit an updated list of insignificant activities annually with the Title V compliance certification.

## NO<sub>x</sub> RACT Plan

- 1. The oxides of nitrogen (NO<sub>x</sub>, expressed as NO<sub>2</sub>) emission from each of Boiler #4 and Boiler #5 shall not exceed 0.20 pounds per million Btu of heat input, based upon a 30-day rolling average. This limit applies at all times, including periods of startup, shutdown, or malfunction.
- 2. E. I. du Pont de Nemours & Company (DuPont) shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), and record the output of the system, for measuring NO<sub>x</sub> emissions from each boiler. The following requirements apply to each CEMS:
  - A. A CEMS shall be operated and data recorded during all periods of operation of each boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments,
  - B. The 1-hour average NO<sub>x</sub> emission rates measured by a CEMS shall be expressed in pounds per million Btu heat input and shall be used to calculate the average emission rates under NO<sub>x</sub> RACT Plan Element (Element) No. 1,
  - C. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(b). At least 2 data points shall be used to calculate each 1-hour average,
  - D. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of a CEMS,
  - E. The span value for NO<sub>x</sub> is 500, and
  - F. When NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7a, or other reference methods approved by the District to provide emission data for a minimum of 75 % of the operating hours in each boiler operating day, in at least 22 out of 30 successive boiler operating days.
- 3. By January 1, 2000, DuPont shall submit to the District the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR Part 60 Appendix B.
- 4. DuPont shall maintain the records listed in 40 CFR §60.49b (g) with the following clarifications:
  - A. The  $NO_x$  emission rates shall be expressed in pounds per million Btu heat input measured, and
  - B. The applicable  $NO_x$  emission limit is contained in Element No. 1. Each record shall be maintained for a minimum of 5 years and made available to the District upon request.
- 5. DuPont shall submit to the District the following reports:
  - A. Excess emission reports for any excess emissions that occurred during the reporting period. "Excess emissions" means any calculated 30-day rolling average NO<sub>x</sub> emission rated, as determined under Element No. 2, that exceeds the emission limit contained in Element No. 1, and
  - B. Reports containing the information required to be recorded by Element No. 4.

- 6. The reports required to be submitted by Element No. 5 shall reflect the preceding semi-annual period. Semi-annual periods shall run from January 1 to June 30 and July 1 to December 31. If no deviation occurred during the semi-annual period, the report shall contain a negative declaration. Each report shall be submitted within 60 days following the end of the semi-annual period.
- 7. In lieu of the requirements in this NO<sub>x</sub> RACT Plan, DuPont may comply with alternative requirements regarding emission limitations, equipment operation, test methods, monitoring, recordkeeping, or reporting, provided the following conditions are met:
  - A. The alternative requirements are established and incorporated into an operating permit pursuant to a Title V Operating Permit issuance, renewal, or significant permit revision process as established in Regulation 2.16,
  - B. The alternative requirements are consistent with the streamlining procedures and guidelines set forth in section II.A. of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, March 5, 1996, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. The overall effect of compliance with alternative requirements shall consider the effect on an intrinsic basis, such as pounds per million Btu,
  - C. The EPA has not objected to the issuance, renewal, or revision of the Title V Operating Permit, and either
  - D. If the public comment period preceded the EPA review period, then the District had transmitted any public comments concerning the alternative requirements to EPA with the proposed permit, or
  - E. If the EPA and public comment periods ran concurrently, then the District had transmitted any public comments concerning the alternative requirements to EPA no later than 5 working days after the end of the public comment period.

The District's determination of approval of any alternative requirements is not binding on EPA. Noncompliance with any alternative requirement established pursuant to the Title V Operating Permit process constitutes a violation of the NO<sub>x</sub> RACT Plan.